April 17, 2007

B-19J

Mr. Robert F. Tally, Jr., Division Administrator
Federal Highway Administration - Indiana Division
575 North Pennsylvania St., Room 254
Indianapolis, IN 46204

Re: U.S. EPA Review and Comments on *US 31 Kokomo Corridor Project, Howard and Tipton Counties, Indiana, Final Environmental Impact Statement,* dated March 2007. CEQ No. 20070101

Dear Mr. Tally:

In accordance with Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (U.S. EPA) has reviewed the Final Environmental Impact Statement (FEIS) for the US 31 Kokomo Corridor project in Howard and Tipton Counties, Indiana. The purpose of the US 31 Kokomo Corridor project is to reduce existing and future projected traffic congestion, and improve safety on U.S. 31 from approximately two miles south of State Road (SR) 26 to one mile north of US 35.

The FEIS identifies Alternative J Modified as the preferred alternative. In part, FEIS Alternative J Modified directly impacts 18.2 acres of upland forest land, 3.7 acres of wetlands, 13.1 acres of 100-year floodplain, 75 residences, and 881 acres of prime farmland, and crosses 19 streams (6,653 linear feet). Alternative J Modified also crosses 1 well head protection zone (WPZ).

U.S. EPA commented on Draft Environmental Impact Statement (DEIS) for this proposal in our letter dated May 23, 2005. We also reviewed and commented on the Supplemental Draft Environmental Impact Statement (SDEIS) and the Preferred Alternative Mitigation Package (PAMP) in our letter dated December 11, 2006. Our SDEIS review concluded that Alternative J Modified was comparable in terms of overall impacts to the five action alternatives (Alternatives E, F, G, I and J) evaluated in the DEIS.

Because detailed and committed mitigation information was lacking in the DEIS and SDEIS, we had rated both documents EC-2 (Environmental Concerns - insufficient information). We urged that all feasible avoidance and minimization measures be incorporated into the FEIS preferred alternative and that these measures be well documented in the FEIS. We had recommended the FEIS include additional information and clearly identify mitigation commitments by INDOT to further avoid, minimize and compensate for the direct and indirect impacts associated with the FEIS preferred alternative.

We appreciate that the FEIS includes the following additional information we requested:

- Section 5 identifies specific crossings where three-sided culverts and bridges may be used.
- The FEIS (Appendix B Sheets 1 through 15) identify 17 parcels of land where upland forest mitigation may be considered during final design.
- The FEIS Chapter 5 describes design measures that may be taken to reduce the risk to groundwater.

The FEIS (Appendix E), like the SDEIS and PAMP, identifies that InDOT proposes that further avoidance, minimization and detailed compensation measures that the resource agencies recommended for resources of concern will be decided, as follows:

- The feasibility of replacing culverts with bridges and the use of three-sided culverts for stream enhancement and wildlife movement will be evaluated in the design phase.
- The potential for stream enhancement and re-vegetation will be investigated in the design phase.
- The FEIS states that the diversion and/or containment of storm water runoff and potential roadway spills within the WPZ will be considered in the design phase.
- Bridge design features will be evaluated in greater detail during the design phase to determine if longer bridge spans are feasible. Mitigation will be provided for any wetlands not spanned by the bridge.
- InDOT will investigate the opportunity to plant trees on upland sites within the right-of-way acquired for this project.

The FEIS includes an InDOT "Commitments Summary Form," found at the end of Chapter 1 (Executive Summary). We understand that InDOT proposes to use this form to keep track of mitigation commitments and mitigation considerations that will not be decided until final project design. However, the FEIS is not clear on what type and level of documentation will be required on this form to substantiate that adequate consideration, identification and implementation of the FEIS potential mitigation measures were undertaken, such as bridging across entire 100-year floodplains, using three-sided culverts for stream crossings, and planting replacement of native tree saplings for loss of upland forest. Nor is the FEIS clear on who is responsible for filling out this form and the time line that must be met in relation to project construction. It is unclear if the resource agencies and the public will have access to the completed form. Consequently, it is uncertain that any additional avoidance, minimization and/or compensation measures that have not already been specifically identified and committed to in this EIS will take place. We recommend that the FHWA Record of Decision (ROD) for this proposal provide an explanation of how the InDOT "Commitments Summary Form" will adequately document and disclose the results of all FEIS proposed and committed mitigation measures, including mitigation measures that will only be considered during final design.

The FEIS discussion concerning Mobile Source Air Toxics (MSATs) has been substantially expanded since the DEIS. Some of the information in the FEIS MSATs discussion concerning modeling, exposure levels and toxicity is inaccurate and needs to be corrected. The enclosure to this letter provides our detailed comments and recommendations concerning the FEIS Mobile

Source Air Toxics information. We recommend the ROD provide a corrected and updated MSATs discussion.

In order to protect air quality in the project area during construction, we recommend InDOT consider strategies to reduce diesel emissions, such as project construction contracts that require the use of equipment with clean diesel engines and the use of clean diesel fuels. We recommend the ROD identify whether or not InDOT will consider or commit to implementing these strategies.

If you have any questions or wish to discuss our comments, please contact Virginia Laszewski of my staff at (312) 886-7501. Please send us copies of the Record of Decision (ROD) and the completed "Commitments Summary Form" when they are available.

Sincerely,

/s/

Kenneth Westlake, Chief
NEPA Implementation Section

Enclosure

cc: Federal Highway Administration, Indiana Division, Mr. Larry Heil, Project Manager, 575 North Pennsylvania St., Room 254, Indianapolis, IN 46204
Indiana Department of Transportation, Ms. Michelle Hilary, Manager, Office of Environmental Services, 100 North Senate Ave., Room N642, Indianapolis, IN 46204-2218
Parsons, Mr. Steve Davidson, P.E., Project Manager, 902 North Capitol Ave., Suite 301, Indianapolis, IN 46304

Enclosure to U.S. EPA comment letter concerning US 31 Kokomo Corridor Project, Howard and Tipton Counties, Indiana

Mobile Source Air Toxics (MSAT)

Section 4.7 (page 4-89 through 4-93) of the FEIS maintains that certain information and tools for MSAT analyses are unavailable, incomplete, or not applicable. U.S. EPA disagrees. The discussion of limitations in the dispersion models, CALINE3 and CAL3QHC, is outdated. While it is true that the CALINE and CAL3QHC were developed and validated a number of years ago, as stated in the FEIS, they continue to undergo validation. A number of recent studies have determined that CALINE, especially "CALINE4," accurately predicts ambient concentrations in near-roadway environments for both gaseous and particulate pollutants (see, for example, Gramatnev et al., Atmospheric Environment, volume 37, pages 465-474, 2003; Zhang et al., Atmospheric Environment, volume 39, pages 4155-4166, 2005). A joint UC Davis - Caltrans report, entitled "A Survey of Air Quality Dispersion Models for Project-Level Conformity Analysis" (June 19, 2006), concluded that available models are appropriate for modeling project-level dispersion of on-road and construction emissions, contradicting the language in the DEIS. Based on these recent studies and report, CALINE4 can be an appropriate tool for dispersion analysis of MSATs. We recommend the summaries should be updated or corrected. The discussion of uncertainties in "Dispersion" should be removed and replaced with an updated discussion of the use of CALINE4.

The discussion of "Exposure Levels and Health Effects" is also inaccurate. EPA has long standing experience and published, peer-reviewed guidance for evaluating long-term health effects, including cancer risk. Recently, EPA has published an Air Toxics Risk Assessment Reference Library (http://www.epa.gov/ttn/fera/risk_atra_main.html) that addresses the precise concerns raised in the air quality analysis – namely, how to develop appropriate exposure scenarios in a risk assessment While we agree that there are always uncertainties associated with such an analysis, most of the uncertainties would be consistent across alternatives, and thus such an analysis would still be sufficient for distinguishing between the impacts among scenarios and informing mitigation. We recommend the discussion of uncertainties in "Exposure Levels and Health Effects" should be removed and replaced with a discussion of possible exposure scenarios typically used by EPA in air toxics risk assessments.

The air quality analysis provides toxicity information for the six MSATs of most concern. We agree with the need to provide this information in the FEIS, but note that the primary health concern for acrolein is not cancer, but rather a respiratory endpoint (nasal lesions, http://www.epa.gov/iris/subst/0364.htm#refinhal). Similarly, benzene (decreased lymphocyte count, http://www.epa.gov/iris/subst/0276.htm#refinhal), acetaldehyde (degeneration of the olfactory epithelium, http://www.epa.gov/iris/subst/0290.htm#refinhal), formaldehyde (respiratory, http://www.atsdr.cdc.gov/toxprofiles/tp111-c2.pdf), and 1,3-butadiene (ovarian atrophy, http://www.epa.gov/IRIS/subst/0139.htm#refinhal) all have non-cancer health endpoints of potential concern. We recommend the summary of toxicological endpoints should additionally include health endpoints other than cancer for acrolein, benzene, acetaldehyde, formaldehyde, and 1,3-butadiene. Cancer is not a known health endpoint for acrolein. Therefore, references to potential carcinogenicity for acrolein should be removed.